

**METHOD FOR GENERATING CONSTRAINED COMPONENT PLACEMENT  
FOR INTEGRATED CIRCUITS AND PACKAGES**

**ABSTRACT OF THE DISCLOSURE**

A method for determining component placement in a circuit includes forming a tree structure that defines the placement of each of a plurality of components associated with the tree structure on a first side, a second side or on both sides of a symmetry line, with at least one component tagged for symmetric placement on both sides of a symmetry line; performing at least one search of the tree structure to determine an initial placement of a subset of the components; and performing another search of the tree structure to determine a final placement of the subset of components whereupon at least a part of each component tagged for symmetric placement is positioned on each side of the symmetry line. The method can be embodied as instructions stored on a computer readable medium which, when executed by a processor, cause the processor to implement the method.